CHAPTER 4

ESTIMATING
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4.00.00.00 - ESTIMATING

4.01.00.00 - GENERAL

4.01.01.00 Introduction

The R/W estimate is the first step in building a credible budget. Estimates are prepared for all transportation projects regardless of whether capital expenditures for right of way on the transportation project exist. The elements of an estimate allow R/W Planning and Management to forecast capital outlay support personnel requirements, capital outlay expenditures, and future programming needs. Estimate data is entered into PMCS on the EVNT RW and COST RW1-6 Screens.

Since various levels of Caltrans' management, the CTC, the Legislature, and local agencies use R/W estimates, it is extremely important that R/W estimates be realistic and reliable. Overestimating may result in a project being deferred or eliminated. Underestimating understates the Department's financial obligations and may adversely affect supplemental funding or staffing needs.

4.01.02.00 As Part of Project Development, Programming, and Budgeting

Direct communication between R/W and Project Development staff is essential during all phases of the project development process. This process starts with initiation of planning studies and carries through to completion of PS&E. When it is determined that an estimate is needed, the program manager or project engineer submits a request to R/W. This is the beginning of a series of requests and estimates corresponding to changes that occur as the project develops.

As part of the estimating process, R/W will review right of way requirements submitted by Project Development for estimating purposes. R/W must notify Project Development if its review identifies design deficiencies. Deficiencies may include lack of replacement access, insufficient right of way width, any damage to a remainder parcel that has not been addressed, or any other unresolved issues. R/W will identify proposed design features that could have a dramatic effect on value.

4.01.03.00 Contingency Costs

Contingency costs are applied to acquisition and utility relocation costs for all estimates. Contingencies for relocation assistance, clearance/ demolition, and title and escrow costs may be applied when considered appropriate. Contingency costs provide for possibilities such as administrative settlements, condemnation awards, utility overruns, interest payments, and unanticipated goodwill payments.

When preparing an estimate for a Project Study Report (PSR) or equivalent, R/W should apply a contingency rate of at least 25% unless district experience dictates otherwise. When preparing an estimate for a Project Report (PR), R/W should always base contingency costs on district experiences.

4.01.04.00 R/W Data Sheet Certification

The manager/supervisor responsible for Estimating and/or Planning and Management Capital shall review and recommend approval of all R/W Data Sheets prepared by staff. The DDC-R/W or designee shall approve all R/W Data Sheets. The following statement will be included directly above the DDC-R/W signature block in all R/W Data Sheets.

> I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable highest and best use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

4.01.05.00 Log of Estimates

A log of all requests for original and revised estimates shall be maintained.

4.01.06.00 Estimate File

The Senior Agent responsible for Estimating must ensure that a file is maintained for each project for which a R/W estimate is prepared. The file will

remain active until the right of way portion of the project is completed, at which time it will become part of the project file.

4.01.06.01 Filing System

For maximum retrievability of previous estimates or other information, the following procedure shall be implemented.

- Establish a file when the first request for a project estimate is received.
- Identify the file by county-route-postmile, expenditure authorization, project limits, and requesting unit.
- Maintain the file in chronological sequence.

4.01.06.02 File Contents

The individual estimate file shall contain:

- The map(s) used in preparing the estimate, with date of original map(s) and dates of subsequent revisions. If, due to size or number, the maps cannot be maintained in the file, a reference should be placed in the file indicating where the maps are filed. Regardless of whether the maps are maintained in the file or in another location, they are part of the file and are to be retained in accordance with file retention requirements.
- Copies of all memoranda of request and responses.
- Copies of all R/W Data Sheets (including attachments) and Estimate Worksheets prepared for the project, along with accompanying R/W Data Sheet Transmittal Memoranda.
- Comparable sales and all other data used to prepare the estimate.
- A diary annotating by date and person making the entry each action taken regarding estimates on the project. The diary shall contain all actions the estimator takes throughout the life of the project.

4.01.07.00 Preliminary Estimates

R/W is often asked to provide a rough estimate without sufficient lead time or adequate mapping. These estimates are prepared using, at a minimum, the first page of the Data Sheet and the Transmittal Memorandum. The face of the R/W Data Sheet for this type of estimate is marked in bold caps:

"NOT VALID FOR BUDGETING OR PROGRAMMING PURPOSES"

The reasons for this notation are indicated in the Transmittal Memorandum.

4.01.08.00 Project Estimate Mapping

R/W Engineering is ultimately responsible for project estimate mapping. Guidelines for map preparation are found in the R/W Engineering Chapter 6, Section 6.01.03.00, and the Drafting and Plans Manual, Section 4-2.1. Some districts have made arrangements for R/W to receive mapping suitable for estimating purposes from other functional units. These arrangements are acceptable as long as the estimate mapping complies with the requirements outlined below.

The unit requesting the estimate shall supply R/W with sufficiently detailed right of way requirements that include width of right of way, alignment, and at least two ties to major property lines.

Estimate mapping should be prepared using aerial mapping, mosaics or as-built plans at 1"=50' (preferably) or 1"=l00’ for urban areas and 1"=100' (preferably) or 1"=200' for rural areas. Mapping prepared using the metric system shall be consistent with the Department’s current policy on metric conversion.

The mapping shall show:

- Improvements
- Property Ownership
- Assessor's Parcel Numbers
- Size of Each Parcel
- Proposed Right of Way Lines
- Access Control
- Easements (Permanent and Temporary)
- Significant Property Ingress Modifications
- Utilities
- Railroad Facilities

4.01.09.00 Training

Each agent assigned estimating responsibilities should receive thorough orientation on why

estimates are prepared and how they are used. Ideally, an estimator should have received practical experience as an appraiser and have taken basic appraisal courses, at the very least. Additional courses in building cost estimating and a working familiarity with various cost estimating resources are recommended. In addition, orientation to the utility relocation function is desirable.

4.01.10.00 Hazardous Waste Site Identification

In the early stages of the project development process, District Project Development and Environmental units will identify sites or facilities that have the potential for being contaminated with hazardous waste or materials. The presence of hazardous waste or materials in future right of way can cause costly project delays if discovered late in the project development process. It is imperative, therefore, that every effort be made to ensure early detection of hazardous waste sites.

As part of the estimating process, estimators must field review subject parcels. If an estimator suspects a hazardous waste site or hazardous materials are present in the proposed right of way and have not been previously identified, the estimator must immediately send written notification to the District Project Development and Environmental units and both District and R/W Hazardous Waste Coordinators. A copy of the memorandum is to be attached to the R/W Data Sheet (Exhibit 4-EX-1).

When field reviewing subject properties, estimators should pay special attention to improvements where structural components could contain large amounts of hazardous materials such as asbestos. In addition, present and prior land uses may indicate the potential for contamination on the site, as well as the possible presence of underground storage tanks that may be in use or have been used for the storage of hazardous materials.

Examples of existing or former uses where hazardous wastes or material may exist include:

- Commercial and industrial sites such as service stations, muffler shops, bulk plants, paint manufacturing companies, machine shops, plating works, dry cleaning plants, chemical and fertilizer companies that may use or have used solvents, cleaning compounds, catalysts, cutting oils, plating solutions, dyes, paints, or other chemicals.

- Junkyards, auto wrecking yards, dumps, or landfills.

- Underground or aboveground tank storage facilities for liquid hydrocarbons, pesticides, or other toxic materials.

- Asbestos siding, roofing, flooring, or insulation on or in existing buildings.

- Disposal dumps or pits that may contain agricultural chemicals or industrial wastes.

- Utility substations or storage/maintenance facilities.

- Sites where contamination may have resulted from an adjacent property owner's operation, or where regulatory action involves implementation of hazardous waste regulations.

- Military bases and reservations.

- Atomic energy sites.

- Railroad sites.

NOTES:

4.02.00.00 - PREPARING THE ESTIMATE

4.02.01.00 Estimating Theory

Estimates are forecasts of anticipated costs for properties that will be acquired at a future date. An estimating procedure has been developed to assist in identifying these costs. All districts must use this procedure in developing estimates unless an alternate method receives Headquarters R/W's prior approval.

The estimating procedure asks the estimator to look into the future to try to determine, to the highest degree possible, the value of subject properties at the time they are to be acquired (assumed to be the year of R/W Certification). This is accomplished in the following manner.

1. Determine the subject's most probable highest and best use including stage of development and probable improvements at the time of acquisition.

2. Determine the current value for the subject based on the rationale described in 1 above.

3. Determine value at time of acquisition by applying escalation rate to current value.

For Example: 20 acres of agricultural land today may have an estimated value of $1,000 per acre. It is anticipated that at the time of acquisition this property will have been developed into a commercial-industrial park site. Commercial-industrial property has a current land value of $10,000 per acre. The estimator determines the subject's current value based on future use. Therefore, the subject's estimated current value based on the future use is $10,000 per acre for a total of $200,000. If the escalation factor has been established at 10%, for example, the subject's escalated value would be $11,000 per acre for a total of $220,000.

4.02.02.00 Property Values

Although estimates are opinions, they are expected to be as solidly based as possible using appraisal principles. The estimator is not expected, however, to be put in the time and effort that goes into an appraisal.

The estimator is allowed to use indicators of value that are not by themselves acceptable in appraising. If District Appraisal staff has previously verified comparable sales and listings data, the estimator shall obtain this information. To prepare an estimate, the estimator will use this information as well as less direct indicators of market value such as:

- Staff appraisals of comparable properties.
- Assessor's information.
- Multiple listing service sales data.
- Observed listings.
- Information from brokers.

Factors to consider when preparing an estimate are increases in real estate values due to changes in land use resulting from anticipation of the proposed project, probable increases in values due to real estate improvements under construction at the time of the estimate, and any other extraordinary costs that can be anticipated.

District experience and the experiences of other districts with payments for loss of goodwill should also be considered and factored into the estimate.

4.02.03.00 Severance Damages/ Construction Contract Work

For estimating purposes, activities commonly referred to as Construction Contract Work (CCW) will be considered Severance Damages when it is anticipated they will be satisfied with a cash payment to be included in the amount payable under clause 2(a) of the R/W Contract. (See R/W Manual Section 8.05.12.00, "Cost to Cure Damages.") If it is known at the estimating stage that the roadway contractor will satisfy Severance Damage type obligations during construction, the obligations will still be referred to as Construction Contract Work.

Project Development usually estimates the costs of Severance Damages and/or Construction Contract Work. Estimates for Severance Damages are to be included in Section 1.A. (Acquisition) on the R/W Data Sheet. This will ensure that Severance

Damages are included as acquisition costs in the COST RW1-5 Screens and when the project is programmed. Estimates for Construction Contract Work will be included in the R/W Data Sheet in Section 1.G. (Construction Contract Work). Costs on this line are not entered in the COST RW Screens.

Construction Contract Work is a Right of Way obligation regardless of how it is accomplished. It is Right of Way's responsibility to take a proactive role in ensuring that CCW costs in Section 1.G. of the R/W Data Sheet are provided to Project Development for inclusion in the PS&E.

4.02.04.00 Properties With Hazardous Waste or Materials

When estimating properties where hazardous waste or materials are known to exist, the estimator will observe the following guidelines.

- **Properties Contaminated With Hazardous Waste** - estimated as if free and clear of that waste.
- **Properties Where Improvements Contain Hazardous Materials That Are Not Stable** - valued as if free and clear of those materials.
- **Properties Where Improvements Contain Hazardous Materials That Are Stable** - estimated at market value. In addition, the cost of removing those hazardous materials will be added to the demolition cost for the project.

For additional information, see "Valuation" guidelines found in Appraisal Chapter 7, Section 7.04.12.07.

4.02.05.00 Limiting Conditions

Limiting conditions are constraints that can reduce an estimate's reliability. They may include inadequate mapping or design information or short lead time. They are always stated in the appropriate section of the R/W Data Sheet; e.g., limiting conditions relating to acquisition are documented in paragraph 5, while limiting conditions relating to utilities are documented in paragraph 7 (see Exhibit 4-EX-1).

4.02.06.00 Assumptions

Assumptions are made both because of limiting conditions and the need to predict future costs far in advance of actual expenditures. They can be made on a parcel-by-parcel basis or may apply to the whole project. Estimators are expected to make reasonable assumptions. When more than one reasonable assumption can be made, the estimator is expected to select the assumption that yields the highest supported anticipated cost. All assumptions are to be documented in the appropriate section of the R/W Data Sheet; e.g., those relating to acquisition are documented in paragraph 5, while those relating to utilities are documented in paragraph 7 (see Exhibit 4-EX-1).

Following are specific applications of the above general policy.

- Estimates will always represent the **most reasonable** and justifiable project delivery schedules.
- Estimates should always be based on the most probable "worst case" and "highest cost" assumptions.
- When estimates are made for a project where several alternatives are under consideration, the estimate used for initial programming purposes should be the same alternative that is used for the construction cost estimate. If the alternative for the construction cost estimate has not been selected, the estimate for the most probable highest cost alternate of those considered by district management as most likely to be adopted shall be used. Estimates should not be artificially inflated by using the cost of an alternative included for study that does not have a realistic chance of being adopted.
- When in doubt because of inadequate right of way or construction details or other factors, a full acquisition should be assumed.
- For business establishments, district experience and the experiences of other districts with payments for loss of goodwill in similar circumstances should be considered. Projected payments should be included in the estimate.

4.02.07.00 Documenting Limiting Conditions and Assumptions

It is very important to document limitations within which the estimate was prepared and assumptions made in developing the estimate. Without a clear understanding of this information, Project Development staff using the estimate will not know whether they have a very rough approximation or a complete estimate that is consistent with the current state of development of the project. In addition, statements of limiting conditions and assumptions may alert design staff to certain design conditions that if modified could reduce or increase project cost. Statements documenting the following limiting conditions and assumptions are to be included in the appropriate section of the R/W Data Sheet; e.g., those relating to acquisition are documented in paragraph 5, while those relating to utilities are documented in paragraph 7 (see Exhibit 4-EX-1).

- The specific parcels that may be partial acquisitions but are assumed, because of incomplete mapping and/or design, to be full acquisitions.

- The specific number of parcels with businesses where it is expected a payment for the loss of goodwill will be required.

- Any known or anticipated extraordinary cost for difficult or controversial acquisition cases based on the district's experience with the subject or similar type of property owner.

- The anticipated additional costs for projects with optimistic schedules that will require rights of entry and/or condemnation proceedings.

- Any other unusual documented higher costs that are anticipated, such as revisions to the general plan, a city incorporation that may affect value, and other governmental actions or projects.

- Long lead time utility relocations.

4.02.08.00 Estimate Content

4.02.08.01 R/W Data Sheet

The completed R/W Data Sheet (Exhibit 4-EX-1) is the R/W estimate. The Data Sheet, with attachments, contains all relevant information and the estimate conclusions.

Workload data from the R/W Data Sheet is entered in the EVNT RW screen. Cost data from the R/W Data Sheet is entered into the COST RW1-5 screens.

A Data Sheet is required for all viable alternates on all proposed projects. If an item on the Data Sheet is not applicable, it should be so indicated. A copy of the COST RW1 Screen reflecting the estimate is to be attached to the Data Sheet for the Preferred Alternate. (COST RW1 Screens are to contain escalated cost.) A Utility Information Sheet (Exhibit 4-EX-5) and a Railroad Information Sheet (Exhibit 4-EX-6) should be used whenever involvements dictate. The Data Sheet, including all attachments, becomes a part of the planning document for which it was prepared (PSR, PSSR, IPR, PR, PID, etc.). Copies of all Data Sheets and attachments and all supporting information, including comparable sales (specify which comparable sales or other data were used to estimate the value of each parcel), are to be placed in the estimate file. The first page of the Data Sheet contains data necessary for PMCS and should be used as the PMCS input document. Refer to Exhibit 4-EX-1, pages 5, 6, and 7 for instructions on completing the Data Sheet.

NOTE: See Chapter 13 for information on estimating utility relocation costs.

4.02.08.02 R/W Estimate Worksheet

The estimator will use the R/W Estimate Worksheet to arrive at individual parcel costs for each project alternate. Because of the varied forms used by the districts and types of projects estimated, statewide standardization of this form will not be mandated. Exhibit 4-EX-2 is a suggested format for the R/W Estimate Worksheet. To ensure that correct data is entered into PMCS, each district must use a worksheet form which contains the following 17 items for each parcel in the estimate.

1. Parcel type (see Exhibit 4-EX-3 for definition)
2. Parcel number
3. Postmile designation (Kilometer Post)
4. Estimated cost
5. RAP cost
6. Clearance/demolition cost

7. Number of RAP displacements
8. Number of clearance/demolition units
9. Number of construction permits
10. Construction contract work cost
11. Title and Escrow fees
12. Area in right of way
13. Area in excess
14. Permitter
15. Estimated cost of permit
16. Type of permit
17. Fiscal year when expenditure will occur

To standardize information entered into PMCS, the district form should be designed to maintain sequential order of the first six items shown above. Data for Items 1 through 5 are required for each parcel in the estimate. Data for Items 6 through 17 will be provided as appropriate. Information contained in the R/W Estimate Worksheet is summarized in the R/W Data Sheet. Copies of all worksheets are placed in the estimate file.

4.02.08.03 Project Permit Fees

Project permit fees are those costs attributed to permits that must be acquired by the Department and **are required to construct the project**. The most common of these permits are Fish and Game 1601 permits, Water Resource Control Board National Pollutant Discharge Elimination System Permits (NPDES), and Regional Water Quality Control Board 401 Water Quality Certifications. Typically these and other permits are acquired during the project's Project Development stage. The fees for these permits are usually one-time expenses, although payment for time extensions on specific permits may occur. Although R/W does not participate in acquiring these permits, they will be treated as R/W capital expenses, and R/W must budget for them.

At the R/W Estimating stage, the R/W estimator will contact the Project Manager to obtain a list of required permits. This list shall include, at a minimum, the name of the permitter, type of permit, total anticipated cost, and the fiscal year when the fees are anticipated to be expended. This information shall be entered into Sections 14-17 of the Estimate Worksheet (Exhibit 4-EX-2). These costs will ultimately be reflected in the R/W Data Sheet (Exhibit 4-EX-1) under Section 1, Right of Way Cost Estimate, Subsection A., Permit Fees.

4.02.08.04 R/W Data Sheet Transmittal Memorandum

A R/W Data Sheet Transmittal Memorandum (Exhibit 4-EX-4) is used to transmit R/W Data Sheets to the unit requesting the estimate. The memorandum should contain a recapitulation of the limiting conditions and assumptions stated in the Data Sheets, along with a discussion of right of way lead time requirements.

4.03.00.00 - ESCALATION RATES

4.03.01.00 General

Escalation can be defined as an increase in cost due to upward changes in market conditions. Because costs typically do increase over time, escalation rates must be developed for estimating purposes. The rates are in the form of percentages and may be district wide or county wide, although individual project rates should be developed and used wherever possible for the greatest accuracy.

The estimator prepares escalation rates for right of way costs; the utility estimator prepares escalation rates for utility relocation costs. (See also Chapter 13, Utility Relocation, for information on escalation rates for utility relocation costs.) The appropriate functional area should review supporting data, including the analysis used to substantiate rates, before the data is used. Escalation rate documentation is to be maintained in the estimate files.

4.03.02.00 Factors Affecting Escalation Rates

Escalation rates are influenced by many factors such as increases in development and building costs, legislation, inflation, and general economic conditions. The effect of these factors can be estimated but cannot be precisely determined.

4.03.03.00 Methods of Determining Escalation Rates

Data used in establishing escalation rates may be found in assessed value trends from resales, the direction and trends of future development of areas, private and governmental forecasts, and construction and building cost indices. Past experience in estimating, appraising, and acquisition in the subject area should not be overlooked.

Judgment and experience aid the estimator in determining the proper rate. Improved methods of determining proper rates should be continuously sought.

4.03.04.00 Individual Escalation Rates

Right of way and utility costs may escalate at different rates. To accommodate these differences, separate escalation rates for right of way (which includes land, improvements, damages, RAP, demolition, and goodwill) and utilities may be applied.

Separate utility escalation rates can be used to show more reliable costs in the Program Documents. This can be important when utility costs are changing more rapidly than other right of way costs. Costs should be escalated to the year of R/W Certification, except where unusual circumstances dictate otherwise. (**Example:** Knowledge that a contract for relocation of a utility may have to be let a year or more before highway construction begins.) Knowledge of the escalated utility costs as an item separated from right of way costs contributes to the effectiveness of the Program Documents. There are many projects where there are only utility costs.

4.03.05.00 Using Escalation Rates

Escalation rates are applied to estimated costs for Acquisition, RAP, Utility Relocation, etc. Estimated costs are escalated to the year of R/W Certification and then spread over the anticipated years of acquisition (including after R/W Certification if applicable). These costs are entered into the COST RW1 Screen, a copy of which is to be attached to the R/W Data Sheet.

NOTES:

4.04.00.00 - UPDATING

4.04.01.00 General

Estimates are prepared during various stages of the project development process. Preliminary estimates prepared at the beginning of the planning process need not be updated unless other units specifically request an update.

Any written request for a revised data sheet may require a field review, a review of property ownerships, a new utility estimate, and a check with the environmental unit.

Estimates prepared for planning reports, such as PSRs, PSSRs, IPRs, and PRs, must be updated whenever project scope, scheduling, or value changes sufficiently to warrant the update. Updating an estimate may involve little more than substituting an amended page to an otherwise current R/W Data Sheet or could involve preparing a new Data Sheet.

4.04.02.00 For Programming Purposes

Once projects are part of one of the Department's Program Documents (STIP, SHOPP, TSM, etc.), updating of estimates may occur whenever it is determined the estimate is no longer valid.

At a minimum, all projects in the Department's Program Documents will be reviewed and updated at the Project Report stage.

NOTES:

CHAPTER 4

Estimating
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EXHIBITS

To: Date _____
Dist _____ Co _____ Rte _____ P/M (K/P) _____
Attention: EA _____
Project Description _____
_____
Subject: Right of Way Data Alternate No. _____

This Alternate meets the criteria for a Design/Build project: Yes ☐ No ☐

1. Right of Way Cost Estimate: To be entered into PMCS COST RW1-5 Screens.

		Current Value Future Use	Escalation Rate		Escalated Value
A.	**Total Acquisition Cost**				$ 1A1
	Acquisition, including Excess Lands, Damages, and Goodwill.	$ 1A2	1A3	%	$ 1A4
	Project Permit Fees.				$ 1A5
B.	**Utility Relocation** (State Share)	$ 1B1	1B2	%	$ 1B3
C.	**Relocation Assistance**	$ 1C1	1C2	%	$ 1C3
D.	**Clearance/Demolition**	$ 1D1	1D2	%	$ 1D3
E.	**Title and Escrow**	$ 1E1	1E2	%	$ 1E3
F.	**Total Estimated Cost**	$ 1F1			$ 1F2
G.	**Construction Contract Work**	$ 1G	*(These are construction costs that are to be included in the projects PS&E.)*		

2. Current Date of Right of Way Certification 2

3. Parcel Data: To be entered into PMCS EVNT RW Screen.

Type	3A	Dual/Appr	3C	Utilities	3D
X				U4-1	
A				-2	
B				-3	
C				-4	
D				U5-7	
E	XXXX			-8	
F	XXXX			-9	

Total 3B

RR Involvements	3E
None	
C&M Agrmt	
Svc Contract	
Design	
Const.	
Lic/RE/Clauses	

Misc. R/W Work	
RAP Displ	3F
Clear/Demo	3G
Const Permits	3H
Condemnation	3I
Excess	

Areas: R/W _____ No. Excess Parcels _____
Entered PMCS Screens ___/ ___/ ___ by _____
Entered AGRE Screen (Railroad data only) ___/ ___/ ___ by _____

4. Are there any major items of construction contract work? Yes ☐ No ☐ (If "Yes," explain.)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No right of way required. ☐

6. Is there an effect on assessed valuation? Yes ☐ Not Significant ☐ No ☐ (If "Yes," explain.)

7. Are utility facilities or rights of way affected?
Yes ☐ No ☐ (If "Yes," attach Utility Information Sheet, Exhibit 4-EX-5.)
The following checked items may seriously impact lead time for utility relocation:
☐ Longitudinal policy conflict(s)
☐ Environmental concerns impacting acquisition of potential easements
☐ Power lines operating in excess of 50 KV and substations
(See attached Exhibit 4-EX-5 for explanation.)

8. Are Railroad facilities or rights of way affected?
Yes ☐ No ☐ (If "Yes," attach Railroad Information Sheet, Exhibit 4-EX-6.)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None Evident ☐ (If "Yes," attach memorandum per R/W Manual, Chapter 4, Section 4.01.10.00.)

10. Are RAP displacements required? Yes ☐ No ☐ (If "Yes," provide the following information.)

No. of single family _____ No. of business/nonprofit _____

No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated _____, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

11. Are there Material Borrow and/or Disposal Sites required? Yes ☐ No ☐ (If "Yes," explain.)

12. Are there potential relinquishments and/or abandonments? Yes ☐ No ☐ (If "Yes," explain.)

13. Are there any existing and/or potential airspace sites? Yes ☐ No ☐ (If "Yes," explain.)

14. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

    Based on the R/W requirements on Page 1 of this Data Sheet, R/W will require a lead time of _____ months from the date regular appraisals can begin to project certification.

    In any event, RW Maps will require _____ months from Final Maps to project certification.

15. Is it anticipated that Caltrans staff will perform all Right of Way work? Yes ☐ No ☐ (If "No," discuss.)

Evaluation Prepared By:

Right of Way:	Name	_____	Date	_____
Railroad:	Name	_____	Date	_____
Utilities:	Name	_____	Date	_____

Recommended for Approval:

_____

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

_____
District Division Chief/Regional Manager
Right of Way

_____
Date

Instructions for Completing the Right of Way Data Sheet

To provide complete and consistent data for input into Right of Way's portion of PMCS, the Right of Way Data Sheet and Right of Way Estimate Worksheet will be used.

The Right of Way Data Sheet has been designed to accomplish dual purposes: 1) function as an estimating form that is incorporated into the Project Report/Environmental Document as appropriate, and 2) provide essential data for PMCS by entry of Right of Way workload and cost estimates on the EVNT RW, COST RW1, and other PMCS screens for which Right of Way is responsible.

Data required to complete Item 1 on the Right of Way Data Sheet is obtained from the totals of various columns on the Right of Way Estimate Worksheet.

All sections of the Right of Way Data Sheet must be completed. If a section is not applicable, it should be so indicated.

The following instructions relate to completion of Right of Way Data Sheet Items 1, 2, and 3. The balance of the Right of Way Data Sheet is self-explanatory.

Entry 1.A.1. - is the total Acquisition cost for the project alternative. It includes acquisition, including excess lands, damages, goodwill, and project permit fees. It is the total of entries 1.A.4. and 1.A.5.

Entry 1.A.2., 3., and 4. - 1.A.2. is the grand total of Column 4 on the Right of Way Estimate Worksheet plus contingency costs.
1.A.3. is the escalation rate for Acquisition activities.
1.A.4. is 1.A.2. escalated to the year of Right of Way Certification using escalation rate 1.A.3.

Entry 1.A.5. - is the grand total of Column 15 on the Right of Way Estimate Worksheet.

Entry 1.B.1., 2., and 3. - 1.B.1. is obtained from the Utility Information Sheet provided by the Utility Estimator plus contingency costs.
1.B.2. is the escalation rate provided by the Utility Estimator.
1.B.3. is 1.B.1. escalated to the year of Right of Way Certification using escalation rate 1.B.2.

Entry 1.C.1., 2., and 3. - 1.C.1. is the total of Column 5 on the Right of Way Estimate Worksheet plus contingency costs.
1.C.2. is the Relocation Assistance escalation rate.
1.C.3. is 1.C.1. escalated to the year of Right of Way Certification using escalation rate 1.C.2.

Entry 1.D.1., 2., and 3. - 1.D.1. is the total of Column 6 on the Right of Way Estimate Worksheet plus contingency costs.
1.D.2. is the Clearance/Demolition escalation rate.
1.D.3. is 1.D.1. escalated to the year of Right of Way Certification using escalation rate 1.D.2.

Entry 1.E.1., 2., and 3. - 1.E.1. is the total of Column 11 on the Right of Way Estimate Worksheet.
1.E.2. is the Title and Escrow escalation rate.
1.E.3. is 1.E.2. escalated to the year of Right of Way Certification using escalation rate 1.E.2.

Entry 1.F.1. and 2. - 1.F.1. is the total of the Current Value column of the Right of Way Data Sheet.
1.F.2. is the total of the Escalated Value column of the Right of Way Data Sheet, excluding items 1A4 and 1A5.

Entry 1.G. - is the total of Column 10 on the Right of Way Estimate Worksheet. The total estimate for Construction Contract Work is to be reported to Project Development and the Project Manager to ensure inclusion in the projects PS&E.

Entry 2 - is the anticipated Right of Way Certification date.

Entry 3.A. - Each parcel is "typed" in Column 1 of the Right of Way Estimate Worksheet (see Exhibit 4-EX-3 for definitions of each type). The total of each type is inserted on the appropriate line.

Entry 3.B. - Total of all parcels in the estimate. Total should equal the sum of Items X through D in the "Type" Column. Do not include a double count for dual appraisal parcels.

Entry 3.C. - Indicates the number of parcels per type that will require a dual appraisal. Refer to Right of Way Manual, Chapter 7, Section 7.01.07.00, for a definition of parcels requiring a dual appraisal.

Entry 3.D. - Utilities workload involvement obtained from the Utility Information Sheet is provided by the Utility Estimator. Refer to Right of Way Manual, Chapter 13, Exhibit 13-EX-6, for definitions of the various utility workload involvements.

Entry 3.E. - Railroad workload involvements obtained from the Railroad Information Sheet provided by the Railroad Coordinator. Enter railroad data in both EVNT RW and AGRE Screens.
Note: Service Contracts are entered into for both Design and Construction services. Enter the number of each in the appropriate location; the total of both is entered on the "Svc Contract" line on the Data Sheet.

Entry 3.F. - Total RAP displacements. Amount is total of Column 7 on the Right of Way Estimate Worksheet.

Entry 3.G. - Clearance/Demolition units. Amount is the total of Column 8 on the Right of Way Estimate Worksheet.

Entry 3.H. - Construction Permits include material and disposal sites. Number is the total of Column 9 on the Right of Way Estimate Worksheet.

Entry 3.I. - Condemnation Suits. Total number of condemnation suits anticipated in conjunction with the project based on district experience.

Instructions for Completing the Right of Way Estimate Worksheet

To provide complete and consistent data for input into Right of Way PYPSCAN system, the Right of Way Data Sheet (Exhibit 4-EX-1) and Right of Way Estimate Worksheet (Exhibit 4-EX-2) will be used.

The Right of Way Data Sheet has been designed to accomplish dual purposes: 1) maintain its existing function as an estimating form that is incorporated into the Project Report/ Environmental Document as appropriate, and 2) provide essential data for PMCS by entry of Right of Way workload and cost estimates on the EVNT RW, COST RW1, and other screens.

To complete the Right of Way Data Sheet, the district should first complete the Right of Way Estimate Worksheet or the district's version of the worksheet. If the district has developed its own worksheet, it must, at a minimum, contain the following 17 items for each parcel in the estimate:

Parcel Data

1. Parcel type (See Exhibit 4-EX-3 for definitions)
2. Parcel Number
3. Post mile/kilometer designation
4. Estimated cost
5. RAP cost
6. Clearance/demolition cost
7. Number of RAP displacements
8. Number of clearance/demolition units
9. Number of construction permits
10. Cost of construction contract work
11. Title and escrow fees
12. Area in right of way
13. Area in excess

Project Permit Data

14. Permitter
15. Estimated cost
16. Type of permit
17. Fiscal year when expenditure is expected to take place

For purposes of standardization and subsequent input into PYPSCAN, the worksheet should maintain the sequential order of the first six items indicated above. Exhibit 4-EX-2 is a suggested format for the Right of Way Estimate Worksheet.

Data for Items 1 through 4 will be developed for each parcel in the estimate. Data for Items 5 through 17 will be developed as appropriate.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

ESTIMATE WORKSHEET

(Form #)

DISTRICT	COUNTY	ROUTE	P.M./K.P.
ALTERNATIVE			EA
PREPARED BY			PAGE OF
DATE			

TYPE	PARCEL	P.M./K.P.	ESTIMATED COST	RAP COST	CLEAR/DEMO COST	NO RAP DISPL.	NO CLEAR/ DEMO	NO CONST PERMITS	CCW COST	ESCROW COST	NAME - OTHER INFO.	R/W AREA	EXC. AREA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)
		TOTAL											
	GRAND TOTAL FROM ALL PAGES												

PROJECT PERMIT FEES

PERMITTER	ESTIMATED COST	TYPE OF PERMIT	DATE TO EXPEND
(14)	(15)	(16)	(17)
TOTAL			
GRAND TOTAL FROM ALL PAGES			

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

ESTIMATE WORKSHEET

(Form #)

DISTRICT	COUNTY	ROUTE	P.M./K.P.
ALTERNATIVE			EA
PREPARED BY			PAGE OF
DATE			

TYPE	PARCEL	P.M./K.P.	ESTIMATED COST	RAP COST	CLEAR/DEMO COST	NO RAP DISPL.	NO CLEAR/ DEMO	NO CONST PERMITS	CCW COST	ESCROW COST	NAME - OTHER INFO.	R/W AREA	EXC. AREA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)
		TOTAL											
	GRAND TOTAL FROM ALL PAGES												

PROJECT PERMIT FEES

PERMITTER	ESTIMATED COST	TYPE OF PERMIT	DATE TO EXPEND
(14)	(15)	(16)	(17)
TOTAL			
GRAND TOTAL FROM ALL PAGES			

PARCEL TYPE DEFINED				
Type/ Factor	**Valuation**	**Improvements Taken**	**Damages CCW Benefits**	**Remarks**
X				Parcels acquired prior to Reg. App. Start Date, e.g.: State-owned excess; Parcels acquired prior to major stop in R/W activities, H&P Parcels; Remaining RAP and Clearance may exist and will be included in RAP and Clearance workloads. Does not include zero value public land takings involving functional replacement of land or improvements (apply appropriate higher type).
A	• Donations • Zero value • Nominal value • Noncomplex parcels to $10,000 including improvements	• None • Little or no value	• Minor Cost to cure or CCW for fencing, road approaches, driveways, or domestic utility reconnections	
B	Full Take: • Improved residential Full or Part Takes: • Unimproved Lands • Market data approach only • RAP valuation on residential parcels • Valuation exceeds non-complex parcel $10,000 limit Requires no specialty valuation such as timber cruise, mach. & equip. Crop valuations, or functional replacement.	• 1 to 4 units • None or misc. improvements and landscaping. The improvement taking does not constitute a farm, business or nonprofit displacement.	Full Takes: • Not Applicable Part Takes: • None or minor adjustment curative work or utility severance damages supported by District estimate or simple market analysis.	This is the typical full or part take of unimproved land or a 1-4 unit improved residential parcel and the part take has little or no effect on the remainder.
C	Full Take: • Multi-Residential • Trailer parks • Small commercial • Office building • Light Industrial • Agricultural • Timber lands when timber cruise required Part Take: • Same as above • Utilize 1-3 approaches to value • Specialty appraisal often required • Goodwill valuations possible • Timber cruises • Bids or consultants estimates for valuation or curative work	• 5-19 units • 1-4 units • Major on-site facilities • None, some, or all Note: Necessitates improvement valuation for taking or damage analysis	Full Take: • Not applicable Part Take: • Minor to extensive depending on improvements taken or left on remainder and size and condition of remaining lands • Requires thorough before and after analysis, field documentation, and engineering estimates for curative work • Damage benefit analysis may be needed	These parcels have a high degree of complexity due to the character of the improvements, the probability of damages requiring actual documentation, and/or the need for specialty valuations by bids, consultants, or staff.

PARCEL TYPE DEFINED				
Type/ Factor	**Valuation**	**Improvements Taken**	**Damages CCW Benefits**	**Remarks**
D	Full Take: • Multi-Residential / Trailer Park • Commercial office building • Heavy Industrial • Properties involving functional replacement other than residential Special Use Properties (churches, hospitals, etc.) Part Take: • Same as above	• 20 units or more • 5 units or more • Major on-site facilities • On-site facilities and equipment	Full Take: • Not applicable Part Take: • Minor to extensive depending on improvement taken or left on remainder and size and condition of remainder parcel • Requires thorough before and after analysis • Full documentation with market data, engineering cost estimates for curative work and other pertinent field data. • Damage/benefit analysis required.	These types of parcels represent the most complex appraisal and acquisition situations. The character of the improvements, assessment of damages and evaluation of specialty items require extensive data collection, correlation, and analysis in the valuation process. Likewise, negotiations on these acquisitions generally involve an issue by issue discussion and resolution of differences.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

(Form #)

EXHIBIT
4-EX-4

To: Date_____

Dist____Co_____Rte_____P/M(K/P)_____

From: _____ EA_____

Right of Way Estimating Function

Project Description_____

_____

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on _____, and the following assumptions and limiting conditions.

[ ] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.

[ ] 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.

[ ] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.

[ ] 4. _____
_____
_____

[ ] 5. We have determined there are no right of way functional involvements in the proposed project at this time as designed.

Right of Way Lead Time will require a minimum of _____ months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node no. 225), we will require a minimum of _____ months prior to the date of certification of the projects. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the district's other programs or our public image generally.

_____
District Division Chief/Regional Manager
Right of Way

Attachments:

- [ ] Right of Way Data Sheet – Page One (always required)
- [ ] Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
- [ ] Utility Information Sheet
- [ ] Railroad Information Sheet

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

UTILITY INFORMATION SHEET

(Form #)

EXHIBIT
4-EX-5 (REV 3/2004)

1. Name of utility companies involved in project:

2. Types of facilities and agreements required:

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.

Disposition of longitudinal encroachment(s):
☐ Relocation required.
☐ Exception to policy needed.
☐ Other. Explain.

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).

5. PMCS Input Information
Total estimated cost of State's obligation for utility relocation on this project:
$ _____

Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.

Utility Involvements

U4-1	_____	U5-7	_____
-2	_____	-8	_____
-3	_____	-9	_____
-4	_____		

Prepared By:

_____ _____

Right of Way Utility Estimator Date

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RAILROAD INFORMATION SHEET

(Form #)

EXHIBIT
4-EX-6

1. Describe railroad facilities or right of way affected.

2. When branch lines or spurs are affected, would acquisition and/or payment of damages to businesses and/or industries served by the railroad facility be more cost effective than construction of a facility to perpetuate the rail service? Yes _____ No _____
(If yes, explain)

3. Discuss types of agreements and right required from the railroads. Are grade crossings requiring service contracts or grade separations requiring construct and maintenance agreements involved?

4. Remarks (non-operating railroad right of way involved?):

5. PMCS Input Information

RR Involvements

None _____
C&M Agreement _____
Service Contract _____
Design _____
Const. _____
Lic/RE/Clauses _____

Prepared By:

_____ _____

Right of Way Railroad Coordinator Date